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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/960,096	09/21/2001	Seiji Kitayama	FUJY 19.019	5074
7590 06/15/2005			EXAMINER	
Rosenman & Colin LLP 575 Madison Avenue New York, NY 10022-2585			WONG, WARNER	
			ART UNIT	PAPER NUMBER
			2661	
DATE MAILED: 06/15/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/960,096	<b>Applicant(s)</b> KITAYAMA, SEIJI	
	<b>Examiner</b> Warner Wong	<b>Art Unit</b> 2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 21-Sep-2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 September 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 1 is objected to because of the following informalities:

The same signal (from Claims line 4) is being looped back by the integrated access device (IAD) to the switch: "A unit for receiving ***the*** signal from the said integrated access device..". (Claims line 6). This is inconsistent with the description of the specification, which describes the signal to be any signal. Appropriate correction is required.

2. The disclosure is objected to because of the following informalities: minor incorrect spellings in the specification title and contents.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Gorshe ('362).

Regarding claim 1, Gorshe ('362) discloses a digital loop carrier system between a switch and subscribers (IAD) comprising of unit receiving signals from switch to IAD (figure 6b), unit receiving signals from IAD to switch (figure 3's low speed interface

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units) with interface conversions for signals between the switch and subscribers (column 4, lines 63-68).

Regarding claim 2, the system by Gorshe ('362) supports the conversion between its TR-008 interfaces from a plurality of subscribers (IAD) which may consist of telephone, modems and ISDN and its TR303 interface from a switch (column 3, lines 41-52; column 4, lines 64-68 & column 5, lines 1-4).

Regarding claim 3, Gorshe ('362) describes low-speed interface (IAD terminating) units (figure 3) within a channel unit group, where a channel unit group services data link in the DS0 level (demultiplexing unit) (column 4, lines 36-44). The system by Gorshe ('362) passes its DS0-level data link thru its Common Channel Signaling (CCS) Global & Embedded Operation Channel (EOC) for processing TR-008 or TR-303 line interface (interface conversion) (column 6, lines 29-31). Gorshe ('362) also described and illustrated configurations with TR-303 supporting RDTs (RDT units) to the switch (column 3, lines 1-15; column 4, lines 63-68; fig. 6d, 7d, 8d).

Regarding claim 4 and 5, Gorshe ('362) describes the CCS Global & EOC unit (signaling converting unit) which processes (extracts and converts) DS0 signals between TR-008 and TR-303 (column 6, lines 29-42).

Regarding claim 7, Gorshe ('362) describes the CCS Global & EOC unit (signaling converting unit) which processes DS0s in accordance with their TR-008 or TR-303 line interface and signaling (column 6, lines 29-42).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gorshe ('362).

Regarding claim 6, Gorshe ('362) describes the element used in converting between TR-008 and TR/GR-303 signaling format (column 4, lines 64-68; column 6, lines 29-31). Gorshe ('362) fails to describe the detail to conversion process from a 4-bit pattern at 3 milliseconds (TR/GR-303) to two 2-bit patterns, each at 1.5 milliseconds (TR-008). However, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to create a conversion process which conforms to standardized formats of TR-008 and TR/GR-303.

5. Claim 8 is rejected under 35 U.S.C. 102(b) as being anticipated by Gorshe ('362).

Regarding Claim 8, it explains GR-303 call control aspects. Gorshe ('362) supports GR-303, including its call control (column 5, lines 24-30).

6. Claims 9-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Gorshe ('362).

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Regarding claim 9, Gorshe ('362) includes a DS1 and VT overhead processing unit (ISDN overhead converting unit) for handling (extracts) the sub-DS1 (DS0) ISDN-BRI, which includes the ISDN D channel (column 7 lines 7-18).

Regarding claims 10-11, Gorshe ('362) includes a CCS global & EOC processing unit which processes (extracts and converts) the ISDN-BRI into either TR-303 or TR-008 formatting (column 6, lines 29-40).

Note: the phrase "ISDN D+ channel" appears not to exist in the technology terminology; it is assumed to be "ISDN D channel" throughout this write-up.

7. Claim 12-14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gorshe ('362) in view of the Paradyne Comsphere 6800 product.

Regarding claim 12, Gorshe ('362) discloses a DLC system for interfacing between TR-008 based subscribers and TR-303 based switch.

Gorshe ('362) fails to describe a trouble detecting unit for detecting the transmission path between the subscribers and the switch and a service state information converting unit for converting the detected trouble.

The legacy T1 multiplexer of Paradyne Comsphere 6800 has built-in diagnostics (trouble detecting unit) capable of detecting and notifying transmission path trouble between itself (IAD) and the connecting switch (Comsphere 6800's AIS signal from loopback diagnostics, Comsphere 6800 NMS pp. 2-14, 2-17, 2-78, 2-296).

It would have been obvious to one of ordinary skill in this art at the time of invention by applicant to make the DLC system by Gorshe ('362) with the Comsphere 6800 diagnostics functionality, and include a service state information converting unit to

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convert the service states in communicating/supporting the TR-008 and TR-303 based devices, for the added value of transmission path diagnostics (motivation).

Regarding claims 13-14, Gorshe ('362) discloses a DLC system for interfacing between TR-008 based subscribers and TR-303 based switch.

Gorshe ('362) fails to describe its system in setting and notifying service states of "stop state" and an "in-service state" for transmission path trouble and recovery respectively.

The legacy T1 multiplexer of Paradyne Comsphere 6800 has built-in diagnostics including setting and notifying OOS (stop state) and IS (in-service state) after the diagnostics (Comsphere 6800 NMS pp. 2-14, 2-118, 2-135).

It would have been obvious to one of ordinary skill in this art at the time of invention by applicant to make the DLC system by Gorshe ('362) with the Comsphere 6800 diagnostics functionality, and include a service state information converting unit to convert the service states in communicating/supporting the TR-008 and TR-303 based devices, for the added value of transmission path diagnostics (motivation).

8. Claim 15 is rejected under 35 U.S.C. 102(b) as being anticipated by Gorshe ('362).

Regarding claim 15, Gorshe ('362) supports TR-303, which specify the functionality of cross-connects on the DS0 level (column 3, lines 3-11).

9. Claims 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gorshe ('362) in view of the Paradyne Comsphere 6800 product.

Regarding claims 16-19, Gorshe ('362) discloses a DLC system with a CCS Global and EOC unit for processing DS0 line and signaling type and a DS1 and VT overhead

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processing unit for processing ISDN D channel (column 6, lines 29-44; column 7, lines 7-10).

Gorshe ('362) fails to describe the DLC system with user settings to configure the DS0 line and signaling type, the ISDN D channel, the subscriber service state and the cross-connects of DS0 ports.

The legacy product Paradyne Comsphere 6800 allows user configuration of its individual channel (subscriber/DS0) settings such as line and signaling type, service state and manual cross-connects of timeslots (DS0 ports) (Comsphere 6800 NMS pp. 2-54 to 2-62, 2-171).

It would have been obvious to one of ordinary skill in this art at the time of invention by applicant to make the DLC system by Gorshe ('362) with user settings for DS0 line and signaling type, ISDN D channel configuration, service state and cross-connects of DS0 ports to allow better system settings control (motivation).

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Warner Wong whose telephone number is 571-272-8197. The examiner can normally be reached on 6:00AM - 3:00PM, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 571-272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Warner Wong  
Examiner  
Art Unit 2661



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